Application No. 10/506,632 Docket No.: 21547-00298-US1
Reply to Office Action of May 18, 2007

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions and listings.

1. (Currently amended) An orthodontic fixture comprising:

a first externally threaded part configured for insertion into a prepared site in a jaw bone; and

a second externally threaded part configured to receive pressure applied by an internally threaded element[[,]]; and

a smooth, non-threaded, alignment section at an apex of said fixture, said alignment section configured to guide a transport segment of the jaw bone as the jaw bone is distracted and thereby prevent inappropriate movement by the jaw bone.

wherein said orthodontic fixture is connected to an appliance <u>configured to facilitate</u> <u>distracting the jaw bone and supported by teeth or adjacent static fixtures and <u>further wherein</u> said second externally threaded part protrudes through said appliance.</u>

- 2. (Withdrawn) A one piece implant for osseodistraction or orthodontic anchorage, having a threaded part for insertion into bone, with the characteristics of a dental implant for insertion into bone, at one end, and the characteristics of a machine screw at the other end, which is intended to protrude into the mouth, for the connection to appliances, or prostheses, for the distraction of bone or the orthodontic movement of teeth.
- 3. (Previously presented) A fixture as claimed in claim 1, wherein said first externally threaded part is configured to be inserted into a prepared site into the jaw bone, and wherein said second externally threaded part is configured to protrude into an oral cavity so that said second externally threaded part may be acted upon by said internally threaded element.
- 4. (Previously presented) A fixture as claimed in claim 1, wherein said second externally threaded part is configured to protrude into an oral cavity, said second externally threaded part having a flattened aspect, such that said second externally threaded part may be

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acted upon by a member selected from the group consisting of: said internally threaded element, cement-on female components, and clip-on female components, wherein said member mates with said flattened aspect to prevent rotation of the member.

5. (Cancelled)

- (Previously presented) A fixture as claimed in claim 1, comprising a polished section which forms a collar to which a gingival cuff will approximate, said collar having a nonround cross-section to allow insertion of the fixture with an appropriately shaped socketed tool.
- 7 (Currently amended) A fixture as claimed in claim 1, wherein the fixture is designed for connection to prostheses, orthodontic appliances, or appliances configured to be supported by adjacent teeth or adjacent static fixtures, or dental implants.
- (Currently amended) A fixture as claimed in claim 1, wherein the fixture is designed for connection to orthodontic appliances, said fixture having within its body a square or rectangular aperture through which an orthodontic wire may be passed to configured to facilitate connection of said fixture to adjacent teeth or appliances may be passed.
 - 9. (Previously presented) A fixture as claimed in claim 1, comprising:

a slightly tapered body having deeply biting threads on said first externally threaded part. said first externally threaded part being adapted for insertion into a jaw; and

a metric machine thread on said second externally threaded part, said second externally threaded part being configured to protrude through a gingiva.

10-11. (Canceled)

12. (Withdrawn) A fixture range or system for Osseo distraction, or for orthodontic anchorage in a jaw, having available matched components, provided with fittings to facilitate the connection of arch wires, or the cementation of orthodontic components.

13. (Previously presented) A fixture as claimed in claim 1, comprising a surface treatment adapted to encourage rapid osseointegration, wherein said surface treatment comprises:

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plasma spray, etching, blasting, titanium dioxide, hydroxyl-apatite or other roughening processes, on only a more superficial endosseous part of the fixture which is configured to contact a bony cortex of an intended site; and

- a smoother, machined surface towards an apical portion of the fixture.
- 14. (Previously presented) A fixture as claimed in claim 1, comprising a surface of increasingly progressive roughness which is relatively smooth toward an apex of the fixture, and which becomes relatively rougher and more attractive to bone growth towards a coronal aspect of a part of the fixture which is configured to contact a bony cortex of an intended site.
- 15. (Withdrawn) A range or system of components for Osseo distraction, or for orthodontic movement of teeth, provided with fittings to facilitate the connection of arch wires, or the cementation of orthodontic components, wherein said range or system of components is arranged to be used in conjunction with a fixture having an externally threaded intra oral part or a threaded and flattened intra oral part.